

Amendments to the Claims

1. (currently amended) An electrical feed-through for a discharge lamp, comprising:
an elongate ceramic core having a plurality of grooves extending in a longitudinal
direction in an exterior surface of said core; and
a plurality of separate electrically conductive wires each extending in a different one of
said plural grooves, ends of each of said plural wires extending beyond ends of said core and at
least one of said ends of said plural wires extending beyond the same end of said core being
twisted together.

2. (original) The electrical feed-through as claimed in claim 1, wherein said plural wires are
one of molybdenum and tungsten.

3. (original) The electrical feed-through as claimed in claim 2, wherein said plural wires are
molybdenum, and wherein said plural wires are twisted at one of said ends and are attachable to
a lead wire.

Claim 4 (canceled).

5. (currently amended) The electrical feed through as claimed in claim 1 ~~claim 4~~, wherein
said core is alumina.

6. (original) The electrical feed through as claimed in claim 5, wherein said plural wires each
have a diameter of up to about 0.25 mm.

7. (original) The electrical feed through as claimed in claim 1, wherein said plural grooves
number six.

8. (currently amended) A discharge lamp comprising:

a discharge tube;

a capillary extending from at least one end of said discharge tube;

an elongate ceramic core within said capillary having a plurality of grooves extending in a longitudinal direction in an exterior surface of said core and a plurality of separate wires each extending in a different one of said plural grooves, ~~first and second~~ ends of each of said plural wires extending beyond ends of said ceramic core, the ends of each wire extending beyond the same end of said core being twisted together and being twisted together;

an electrode at ~~said~~ a first end of said plural wires extending into said discharge tube;

and

a seal at one end of said capillary.

9. (original) The high intensity discharge lamp as claimed in claim 8, wherein said core is alumina and has six grooves.

10. (original) The high intensity discharge lamp as claimed in claim 8, wherein said plural wires are selected from molybdenum and tungsten.

11. (original) The high intensity discharge lamp as claimed in claim 8, wherein a part of said core extends outside said capillary, and wherein the seal comprises a donut-shaped frit surrounding said part of said core that extends out of said capillary.

12. (original) The high intensity discharge lamp as claimed in claim 8, wherein said electrode is a tungsten electrode connected to said first end.

13. (original) The high intensity discharge lamp as claimed in claim 8, wherein said plural wires are tungsten and said plural wires twisted at said first end are said electrode.

14. (original) The high intensity discharge lamp as claimed in claim 8, wherein said discharge tube is a high intensity discharge (HID) ceramic tube.

15. (original) The high intensity discharge lamp as claimed in claim 8, wherein said discharge tube and said core have substantially the same coefficient of thermal expansion, and wherein the coefficient of thermal expansion of said plural wires is about one half of the coefficient of the thermal expansion of said core.

16. (original) The high intensity discharge lamp as claimed in claim 8, wherein said core is generally cylindrical and said plural grooves are evenly spaced around a circumference of said core.

17. (currently amended) A feed-through comprising:

a fluted ceramic core having plural channels; and
a plurality of individual tungsten wires that are each in a different one of said plural channels,
~~ends of each end of~~ said plural wires extending beyond ~~a first end ends of the core and are being~~
twisted together to form an electrode tip.

18. (original) The feed-through as claimed in claim 17, wherein the plural channels number six and are parallel to each other about a longitudinal axis of the core.

19. (original) The feed-through as claimed in claim 17, wherein the plural wires each have a diameter of up to about 0.25 mm.

20. (original) The electrical feed-through of claim 1 wherein of claim 1 wherein the core has a hexagonal, rectangular, or oval cross section.

21. (original) The discharge lamp of claim 8 wherein the core has a hexagonal, rectangular, or oval cross section.

22. (original) The feed-through of claim 17 wherein the core has a hexagonal, rectangular, or oval cross section.